In the Claims:

1. (Previously Presented) A method for maintaining synchronization and power control of wireless signals sent between wireless gateways comprising:

transmitting, from a subscriber access unit to a base station processor, an idle mode signal for maintaining an idle mode connection therebetween, the idle mode signal providing synchronization with the base station processor without actively sending data thereto;

receiving the idle mode signal at the base station processor, the idle mode signal having a power level associated therewith;

determining, by a power level detector in the base station processor, the power level of the idle mode signal;

transmitting, to the subscriber access unit, a power control message indicative of a change to the power level of successive idle mode signals;

computing, at the subscriber access unit, a new power level corresponding to the power control message;

adjusting, at the subscriber access unit, the transmission power according to the new power level; and

transmitting a successive idle mode signal from the subscriber access unit to the base station processor at the new power level, the subscriber access unit and the base station processor maintaining the idling mode connection at the power level of the power control message.

2. (Previously Presented) The method of claim 1 wherein the idle mode signals are sent at predetermined

intervals.

3. (Original) The method of claim 2 wherein the predetermined intervals are time slots.

4. (Previously Presented) The method of claim 3 wherein a plurality of a predetermined number of time slots comprises a power control group.

5. (Previously Presented) The method of claim 3 wherein each time slot corresponds to a particular subscriber access unit.

6. (Previously Presented) The method of claim 5 wherein the power control message is sent to the subscriber access unit corresponding to the time slot of the idle mode signal.

7. (Previously Presented) The method of claim 6 wherein a power control metric determines the power level of the power control message.

8. (Original) The method of claim 7 wherein the power control metric further comprises at least one of a signal-to-noise ratio, a link quality measurement, a carrier-to-interference (C/I) ratio, and a bit-error rate (BER).

9. (Previously Presented) The method of claim 1 wherein the power control message further comprises a power control bit indicative of a change in the power level for

successive idle mode signals.

10. (Previously Presented) The method of claim 1 wherein computing the new power level further comprises determining which of a plurality of directional antenna elements the idle mode signal was sent from.

11. (Original) The method of claim 10 wherein the power control message further comprises a pattern control bit indicative of which of a plurality of antenna patterns is to be used for successive transmissions.

12. (Previously Presented) The method of claim 1 wherein the idle mode signals are sent on a reverse link and the power control messages are sent on a forward link.

Claim 13 (Cancelled).

14. (Previously Presented) The method of claim 1 wherein the power control message is sent two time slots after the corresponding idle mode signal.

15. (Original) The method of claim 1 wherein the power control message is operable for maintaining a code phase lock.

16. (Previously Presented) The method of claim 2 wherein the predetermined intervals further comprise a minimal duration required to maintain power control.

17. (Original) The method of claim 16 wherein the minimal duration corresponds to an acceptable power control error.

18. (Previously Presented) A system for maintaining synchronization and power control of wireless signals sent between wireless gateways comprising:

a base station processor;

at least one subscriber access unit operable to send an idle mode signal for maintaining an idle mode connection with said base station processor, the idle mode signal providing synchronization with the base station processor without actively sending data thereto;

a transceiver at the base station processor operable to receive the idle mode signal;

a power level detector in the base station processor operable to determine a power level of the idle mode signal;

a link quality controller in the base station processor operable to compute, based on the power level, a power control message indicative of a change to the power level of successive idle mode signals;

a transceiver in the base station processor operable to transmit the power control message to the at least one subscriber access unit; and

the at least one subscriber access unit operable to compute a new power level corresponding to the power control message, and further operable to transmit a successive idle mode signal to the base station processor for maintaining the idling mode connection at the power level of the power control

message.

19. (Previously Presented) The system of claim 18 wherein the at least one subscriber access unit is further operable to send the idle mode signals at predetermined intervals.

20. (Original) The system of claim 19 wherein the predetermined intervals are time slots.

21. (Previously Presented) The system of claim 20 wherein a plurality of a predetermined number of time slots comprises a power control group.

22. (Previously Presented) The system of claim 21 wherein the predetermined number of time slots is 16.

23. (Previously Presented) The system of claim 19 wherein each time slot corresponds to a particular subscriber access unit.

24. (Previously Presented) The system of claim 23 wherein the base station processor is further operable to send the power control message to the at least one subscriber access unit corresponding to the time slot of the idle mode signal.

25. (Previously Presented) The system of claim 18 wherein the power control message further comprises a power control bit indicative of a change in the power level for

successive idle mode signals.

26. (Previously Presented) The system of claim 18 further comprising a directional antenna having a plurality of elements, wherein the base station processor is further operable to determine the new power level by determining which of the elements the idle mode signal was sent from.

27. (Original) The system of claim 26 wherein the power control message further comprises a pattern control bit indicative of which of the plurality of elements is to be used for successive transmissions.

28. (Previously Presented) The system of claim 18 further comprising a reverse link and a forward link, wherein the idle mode signals are sent on a reverse link and the power control messages are sent on a forward link.

29. (Previously Presented) The system of claim 18 wherein the base station processor is operable to send the power control message two time slots after the corresponding idle mode signal.

30. (New) A subscriber unit comprising:

a wireless transceiver for providing wireless communications of digital signals over a digital communications path, and transmitting an idle mode signal having a power level associated therewith for maintaining an idle mode connection over the digital communications path without actively sending data, said wireless transceiver for

receiving over the digital communications path a power control message indicative of a change to the power level of successive idle mode signals,

computing a new power level corresponding to the power control message,

adjusting the transmission power according to the new power level, and

transmitting a successive idle mode signal at the new power level for maintaining the idling mode connection at the power level of the power control message.

31. (New) A subscriber unit according to Claim 30 wherein the idle mode signals are sent at predetermined intervals.

32. (New) A subscriber unit according to Claim 31 wherein the predetermined intervals are time slots.

33. (New) A subscriber unit according to Claim 32 wherein a plurality of time slots comprises a power control group.

34. (New) A subscriber unit according to Claim 32 wherein each time slot corresponds to a particular subscriber unit.

35. (New) A subscriber unit according to Claim 34 wherein the power control message is sent to the subscriber

unit corresponding to the time slot of the idle mode signal.

36. (New) A subscriber unit according to Claim 35 wherein a power control metric determines the power level of the power control message.

37. (New) A subscriber unit according to Claim 36 wherein the power control metric comprises at least one of a signal-to-noise ratio, a link quality measurement, a carrier-to-interference (C/I) ratio, and a bit-error rate (BER).

38. (New) A subscriber unit according to Claim 30 wherein the power control message comprises a power control bit indicative of a change in the power level for successive idle mode signals.

39. (New) A subscriber unit according to Claim 30 wherein the power control message is received two time slots after the corresponding idle mode signal.

40. (New) A subscriber unit according to Claim 31 wherein the predetermined intervals further comprise a minimal duration required to maintain power control.

41. (New) A subscriber unit according to Claim 40 wherein the minimal duration corresponds to an acceptable power control error.